

Erpironmental Protection Agency

US EPA RECORDS CENTER REGION 5

2200 Churchill Road, Springfield, Illinois 62706

MEMORANDUM

DATE:

July 14, 1980

TO:

Mike Nechvatal

FROM:

Phillip Westen, Dennis Mastroddi

SUBJECT:

St. Clair County -- 16304501 -- East St. Louis/SCA -- Milam

This site was visited by Dennis Mastroddi and myself on June 25, 1980, with Perry Mann of Southern Region FOS and Ron St. John of the drill rig. The location of the site is N 38° 39' 30" and W 90° 07' 00". The legal description is the NE 1/4 of Section 5, T2N, R9W in Canteen Township.

This is a landfill operation that receives general municipal waste, commercial waste, along with a number of special wastes (see attached list).

Upon arriving at Milan we drove down to the new barrel area to give Ron St. John a view of the area of the drill rig will be working in. This area has a trench dug in it that drains to Cahokia Canal. The draining is by means of a pump that runs during the day and is shut off at night. The water being pumped off is described as surface water by SCA Services. Water has been noted during previous inspections to be rushing into the trench from the side walls. This trench is usually full every morning even during long periods of low precipitation.

The area that Milan sits in was at one time in a cone of depression from pumps in the East St. Louis area. The pumps were stopped approximately ten years ago and since that time the ground water level has risen to its present elevation. This area was also at one time part of a meander of the Mississippi River which would allow for depositing of sand and heavier material in this area. Because of the constant pumping occurring now and the past history of pumping in the area there is a chance of changing the ground water flow and creating a new smaller cone of depression.

Monitoring of wells at the facility have shown high levels of ROE in the down gradient wells along with high chlorides. The mean highs for four wells in ROE are higher than the means for the two background wells. Also the area is not one of very good geology in that the soils are fairly permeable $(7x10^{-3}-9x10^{-9})$ with a thin clay layer that has a high plasticity (45-72). Leachate is not generally seen at this facility, yet with the rains and poor drainage of the site **RECEIVED** formed.

KM PMM J PCM

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After discussing the high levels of ROE and the situation of the pump with Mark Schollenberger of Water it was decided the facility needed to apply for an NPDES permit for the pump. The reasons for it requiring a NPDES permit are; first it is a point source discharge, second it has the potential for discharging polluted water into Cahokia Canal, and third it does not fall into any category of those that are excluded from needing a NPDES permit.

While in the barrel area one well was observed to be surrounded by water. This well, probably G128 was in a low area of the site. Depth to water was taken for the three wells in the barrel area. These depths were calculated from ground level, and are G131 -- 4 ft., G132 -- 3.5 ft., and G133 -- 7.2 ft. These three wells were all above the low areas, and the depth to water corresponded to their distance above the low spots.

After traversing this area Dennis and I then walked between the Phase I area and Phase II, Ron and Perry left shortly after this, so that the remainder of the ODI inspection was performed by the two of us. In this area large areas of inadequate cover were noted as evidence by photo #18. From here we walked around Phase I which has been filled. There were numerous areas of refuse exposed by erosion all around the area. On the southeast side of the active area there was one Section (171.5 x 97.5 ft.) that was poorly covered refuse. On all three areas birds were observed feeding. Some flies were present but not extremely numerous at this time. Inadequate cover has been a continual problem at Milan from January 25, 1978 to April 22, 1980 there have been 42 occasions of inadequate cover or no cover placed.

While walking along the southeast edge off from the active area, a strong burning odor was detected. The facility has had problems in the past with underground fires. Seven times they were noted for burning, from January 1978 to April of 1980. There was no smoke detected or discoloration around the vent in the ground, yet the odor was strong at the vent and the vent was releasing extremely warm air. This is something that should be watched for further occurrence.

Recommendation for ODI to list this site on the inventory for the following reasons:

- Lack of a NPDES permit for ground water pump.
- 2. Pollution of the shallow aquifer as indicated by wells G111, G112, G118, and G129.
- 3. Inadequate cover that allows for vector habitat such as birds and flies.
- 4. Fires which have occurred in the past and are a definite potential in the future.

PW:rd2783B/4-5

Attachment